U.S. ARMY CHEMICAL MATERIALS AGENCY www.cma.army.mil

CMA NEWS | January 2009

CMA PROGRESS AT A GLANCE

as of Jan. 5, 2009:

Anniston Chemical Activity, Ala.: On Dec. 24, 2008, nerve agent-filled munition disposal operations safely concluded with the processing of the last of the 44,131 VX land mines and a total of 196,925 gallons of VX that was stored in Anniston. Since disposal operations began on Aug. 9, 2003, Anniston Chemical Activity employees have emptied more than 99 storage igloos and Anniston's stockpile has been reduced by 55 percent. Including the GB filled munitions, 361,802 nerve agent munitions and 293,003 gallons of liquid nerve agent have been safely processed by Team Anniston employees.

Deseret Chemical Depot, Utah: Tooele Chemical Agent Disposal Facility has safely disposed of 2,857 mustard agent-filled ton containers and 54,453 mustard agent-filled 155 mm projectiles. Mustard operations began in August 2006.

Newport Chemical Depot, Ind.: Newport Chemical Agent Disposal Facility work force continues Phase One closure activities, including demolition of the Chemical Agent Transfer System glove boxes and flushing the hydrolysate tanks. In place decontamination of reactor bay equipment is essentially complete and removal of agent piping has started. The secondary waste Drum Repack Facility is shut down until spring 2009.

Pine Bluff Chemical Activity, Ark.: Pine Bluff Chemical Agent Disposal Facility received the first enhanced onsite container carrying mustard agent-filled ton containers on Dec. 4 which was then processed on Dec. 7. The ton containers are the last chemical weapons disposal campaign. Following completion of disposal operations, PBCDF will begin its closure phase. Storing 3,850 tons of chemical agent or 12 percent of the U.S. Army's original chemical weapons stockpile has been done safely for more than 60 years.

Umatilla Chemical Depot, Ore.: Umatilla Chemical Agent Disposal Facility is in a lengthy changeover from VX nerve agent to HD (mustard) agent. The VX campaign ended Nov. 5, 2008, and a community reception to mark the occasion was held Nov. 20, 2008. Mustard agent processing could begin in spring or early summer 2009.

CMA Eliminates all VX at its Disposal Sites; Continues Oversight of VX Stored at BGAD

The U.S. Army Chemical Materials Agency (CMA) announced a major milestone with the elimination of all nerve agent VX that it was responsible for destroying in the nation's stockpile. On Dec. 24, 2008, the Anniston Chemical Agent Disposal Facility (ANCDF) destroyed the last of its VX stockpile, marking the end of VX in CMA's destruction facilities. (see article on ANCDF's elimination of VX stockpile.) A very small stockpile of VX still remains at the Blue Grass Army Depot in Blue Grass, Ky.; however, CMA is only responsible for storing the stockpile. The Assembled Chemical Weapons Alternatives, a separate Department of Defense Program, is charged with destroying the Blue Grass stockpile.

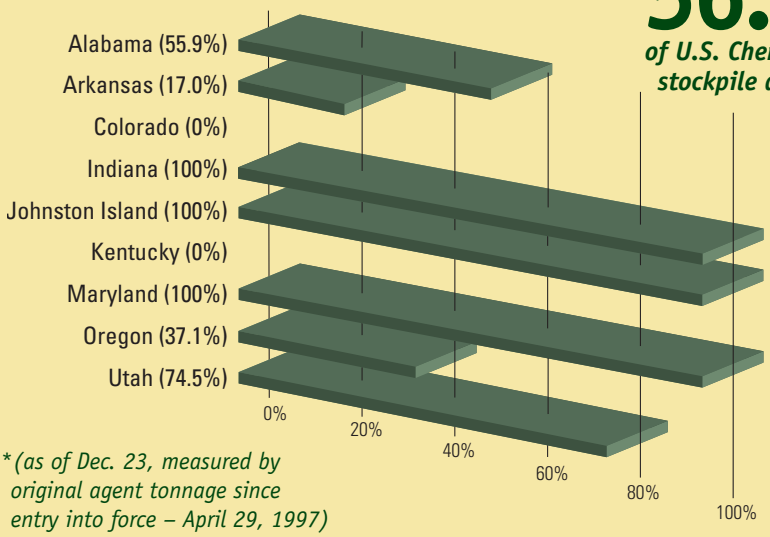
"The end of VX is a tremendous accomplishment for CMA. Everyone has worked hard to achieve this milestone and it was accomplished with safety as our top priority. Congratulations to everyone. Let's continue with our goals to safely reach our next milestone," said Conrad Whyne, director of CMA.

This latest milestone is significant in that it is the second chemical agent that CMA has eliminated from our nation's stockpile. The first nerve agent eliminated from the national stockpile was GB (sarin). VX is the least volatile of the nerve agents, but it is the most potent and can be fatal with an exposure as small as one drop to the human skin, if the area is not immediately and thoroughly treated.

VX was originally developed by the British and shared with the United States in 1953. After investigation at Aberdeen Proving Ground, Md., the agent was found to be much more lethal than any of the G-series agents, including GB (sarin) and GA (Tabun). VX is not an acronym. The "V" was originally attached to the agent because it was thought to be "venomous."

CMA - U.S. CHEMICAL AGENT STOCKPILE DESTROYED

56.3%
*of U.S. Chemical Agent stockpile destroyed**



*(as of Dec. 23, measured by original agent tonnage since entry into force – April 29, 1997)

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ANCDF Completes Last Nerve Agent Munition Disposal Campaign

"It's official. The last VX filled land mine that had been stored here has been safely demilitarized," said Timothy K. Garrett, site project manager at the Anniston Chemical Agent Disposal Facility (ANCDF).

"We have reached a truly remarkable milestone following more than five years of deliberate but careful operations. All nerve agent munitions – those containing GB and those containing VX – have been safely processed," continued Garrett.

Since disposal operations at the ANCDF began in August 2003, employees have safely demilitarized 54 percent of the chemical munitions that have been stored for 47 years.

"The incredible work done by the ANCDF has allowed the Chemical Activity employees to empty 99 storage igloos. This means that, although safely stored for years, the risk to the community has been reduced substantially with all nerve agent munitions gone from storage," said Lt. Col. Andrew M. Herbst, commander, Anniston Chemical Activity (ANCA).

Altogether, 361,802 munitions have been processed at the ANCDF. Making up the total were 219,374 VX-filled munitions and 142,428 GB-filled munitions. The other chemical munitions stored here – mustard-filled projectiles, mortars, and large containers – will be demilitarized in the near future. First, an extensive changeover and maintenance phase will allow workers to prepare for the final disposal campaign here.

Munitions Handler Luke Bohannon gives the thumbs up sign as the last VX land mine rides the conveyor to its safe destruction.

Westinghouse Anniston Project Manager Robert C. Love said, "I'm proud of the job our workers have done – safely destroying all of the nerve agent-filled munitions is quite an accomplishment. Now, we move on to the mustard-filled munitions and we will work hard to safely destroy them as well."

Pine Bluff Arsenal Begins Final Chemical Weapons Disposal Campaign

On Dec. 4, employees at the Pine Bluff Chemical Activity (PBCA) safely transported the first enhanced onsite container carrying mustard agent-filled ton containers to the Pine Bluff Chemical Agent Disposal Facility (PBCDF). The first ton container was processed at PBCDF on Dec. 7.

"With the start of the last chemical weapons disposal campaign we are one step closer to finishing the storage mission and making our community safer with the elimination of all our stockpile," said Lt. Col. Cliff Johnston, PBCA commander.

The drained agent will be processed through the liquid incinerator and the empty ton containers will be thermally decontaminated in the Metal Parts Furnace. Unlike previous disposal campaigns that eliminated nerve agent, mustard is a blister agent. Upon completion of the disposal operations, PBCDF will begin its facility closure phase. The facility will be decontaminated and dismantled in accordance with the site's Resource Conservation and Recovery Act permit.

"Current estimates predict the duration of the ton container disposal campaign to be about three years," said Mark Greer, PBCDF site project manager. "We are confident that we will complete disposal operations by the Chemical Weapons Convention Treaty date of 2012."

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>
> — ***Mark Greer,*** *site project manager at PBCDF*

Chemical weapons disposal operations began at the PBCDF in March 2005 with GB nerve agent-filled rockets and were completed in May 2007. The second disposal campaign, VX nerve agent-filled rockets ended in February 2008, while the third campaign, VX nerve agent-filled landmines ended in June 2008.

"Our employees did an excellent job completing the changeover outage and will continue to move forward with operations, keeping the safety of our work force and the public as our top priority," said David Reber, project general manager for Washington Defense Group, EG&G Division of URS Corporation, which operates the plant for the Army.

TESTING THE LIMITS

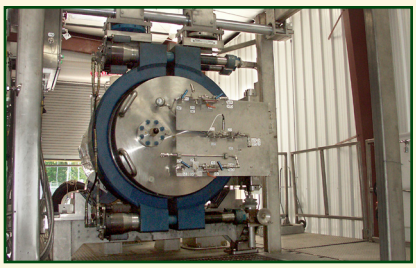
NSCMP taking Explosive Destruction System into new frontier

No stranger to challenges, the U.S. Army Non-Stockpile Chemical Materiel Project (NSCMP) has proved since 1992 that it can tackle any obstacle. Among its latest missions is testing the limits of its on-site treatment technology known as the Explosive Destruction System (EDS).

The system's main component, a sealed, stainless steel vessel, contains all blast, vapor and fragments, protecting operators and the surrounding environment. The EDS uses linear shaped explosive charges to access chemical munitions and destroy their explosive contents, then adds reagent to neutralize the chemical agent.

While the EDS is currently certified for a maximum net explosive weight of 4.8 pounds of TNT, NSCMP is testing the system to validate whether it can withstand a higher explosive capacity. This testing will support the mission to treat 56 German Traktor Rockets (GTRs) in storage at Pine Bluff Arsenal (PBA), Ark. GTRs, which primarily contain nitrogen mustard and several arsenical-based fills, were captured during World War II and sent to PBA for analysis. The total net explosive weight of a GTR's rocket motor propellant, explosive burster and the EDS linear shaped explosive charge is equivalent to 17 pounds of TNT. NSCMP has tasked Sandia National Laboratories (SNL) to validate that the EDS can safely contain a high order detonation of a GTR.

The work at SNL will require testing of the EDS with an explosive equivalent of 21.5 pounds of TNT. Three tests will be required at this level to validate the EDS capability to contain this explosive charge. This testing supports NSCMP's ongoing mission to continually seek ways to safely destroy recovered chemical warfare materiel.



The larger EDS 2 (shown here) is approved to handle up to six chemical-filled rounds at one time. NSCMP is currently testing the system to validate whether or not it can withstand a higher explosive capacity.

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